

Engenuity GB-102 Two Wire Test Set with Signaling

The Engenuity GB-102 2 Wire Test Set with Signaling functions provides an intuitive Graphical User Interface (GUI) for the user to a Palm PDA or a PC/Laptop computer.

The GB-102 DS0 signaling mode emulates a PBX (FXS or Station) or CO (FXO or Far End) for complete voice call processing. Use any Butt set or telephone to take or originate calls. In FXS/PBX/Station modes, the test set provides battery and rings the phone on incoming calls. Received digits are captured and displayed on the graphical user interface.

The GB-102 provides the following features and capabilities:

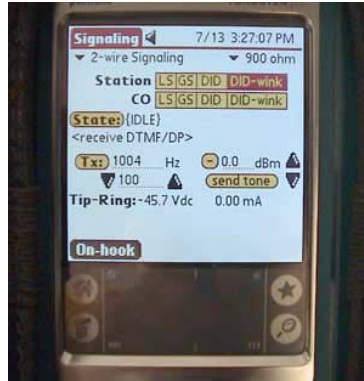
- **Palm PDA or PC/Laptop Graphical User Interface (GUI) with one-touch operation**
- **CO and Station/PBX emulation**
- **Loop-Start (LS), Ground Start (GS), Direct Inward Dialing (DID) Immediate and WINK modes, or E&M Signaling**
- **Internal -48vDC Battery, Ringing and Dial-tone generation (DTMF, MF, and DP)**
- **2-wire 600/900/1200 ohm termination**
- **Generate tones and measure frequency, level and noise**
- **Measure line voltage and current**
- **Built in speaker for audible monitoring**
- **Upgradeable to 2/4 Wire TMS w/Signaling**
- **Upgradeable to Include DS1**



**Front View GB-102
With carrying case**

- **Hand held unit with padded carrying case**
- **Built-in On Line Help & Tips Guide**
- **Interactive User manual**
- **AC/DC adapter charger**
- **Li-ION battery pack**
- **Extended temperature Li-ION Battery**

Sample PDA Screen



Specifications

Signaling

Impedance: 900 ohm
 Emulation: CO, Station/PBX
 Modes: LS, GS, DID-immediate, DID-Wink
 Digits: DTMF, MF, and DP
 CO Source: $-48 \pm 1\text{VDC}$
 CO output: Dial-Tone & RING 2RENLine
 Voltage: $0 \text{ to } \pm 95\text{v} \pm 1.5\text{VDC}$
 Line Current: $\pm 3 \text{ to } 80 \pm 1.0\text{mA}$
 Timing: Pre-Wink, Pre-Digit, Wink Delay & Delay
 Answer Delay: (All measurements $\pm 2\text{mS}$)
 Display: Current Signaling State

VoiceBand Receiver

Interface: 2-wire 600/900/1200 ohms impedance
 Level: $+3 \text{ to } -40 \text{ + or - } 0.4\text{dBm}$
 Frequency: $300 \text{ to } 3400 \pm 2 \text{ Hz}$
 Noise measurement in PBX Modes: 93 to $<18 \text{ dBm}$
 Voltage: $0 \text{ to } \pm 95\text{v} \pm 1.5\text{VDC}$
 Current: $\pm 3 \text{ to } \pm -80 \pm 1.0\text{mA}$
 DTMF: $0 \text{ to } -25\text{dBm}$ 9dB $\geq 45\text{mS}$
 MF: $-1 \text{ to } -24\text{dBm}$ 6dB $\geq 25\text{mS}$

VoiceBand Transmitter

Interface: 2-wire 600/900/1200 ohm impedance
 Level: $+1 \text{ to } -50 \pm 0.4\text{dBm}$
 Frequency: $300 \text{ to } 3400 \pm 2 \text{ Hz}$
 Voltage Output: $-48\text{v} \pm 1 \text{ vDC}$ CO mode
 Current Output: limited to $20 \pm 1.5 \text{ mA}$

DTMF: 0 dBm -2dB Twist, $75 \pm 1 \text{ mS}$
 MF: -6 dBm -1 dB Twist, $75 \pm 1 \text{ mS}$
 Wink: $250 \text{ + or - } 2 \text{ mS}$

Specifications subject to change without notice 6/06

Power

Input Power: 100 to 120 volts AC
 7.2 V Li-ION Battery pack provides 4hrs
 continuous operation up to 10 hrs on full charge

Mechanical

Size – $1.6'' \times 3.7'' \times 9''$
 Weight – Approximately 1.2 pounds.

Environmental

Operating Temperature: $0 \text{ to } +50 \text{ }^{\circ}\text{C}$
 Storage Temperature: $-20 \text{ to } +70 \text{ }^{\circ}\text{C}$
 Humidity: 4 to 90%, non-condensing

Ordering Information:

When ordering a Signaling Transmission Impairment Measuring System (TMS) specify model:

Engenuity GB-102

Engenuity Upgrade to GB104
Eng-QST-U4WB

Engenuity Upgrade to include DS1
ENG-QST-UDS1

Engenuity Communications is a developer and supplier of innovative transmission products and test equipment for operating telephone companies including SLC5 and D4 channel units and NCTE units. For more information about fine Engenuity Communications products visit our web site at www.EngenuityCommunications.com or contact your nearest Engenuity Regional Sales Office or Engenuity Customer Service at 1-800-980-ECOM.